the likenesses which *Titanotherium* shows to the Artiodactyl* must be either purely superficial and secondary, or a cropping out of ancient characters which had been dormant for man^ generations.

Horns.—The Ungulata are the only order of mammals whicl possess horns; as they are on the whole a more defenceless grou| than the Carnivora, it may be that the horns are a counterpoise to the teeth and claws of the latter; need for defence and foi armature in the combats with their own kind for the favours of the does has led to a different kind of protective and aggressive mechanism. Horns as weapons are, however, particularly effective in this group wherever they exist. A Huminant is most frequently a large and heavy animal without the agility and litheness of the Carnivore. It is precisely to this sort oi animal, where weight is an important consideration, that horns are the most suitable weapons. This is further shown by the fact that although the general term horn is used to describe the weapons of the Ungulate mammals, there is more than one kind of structure included under this general term; it is indeed probable that the extreme terms in the series of horns have been independently acquired by their possessors. There is but little in common between the horns of a Giraffe and of a [Rhinoceros.

In the .Rhinoceros we have one or two horns, in the latter case one placed behind the other, which are purely epidermic growths; they may indeed be regarded as matted masses of hair, borne, it is true, upon a boss of bone, which however is not a separate structure. The Giraffe supplies us with the simplest term in that series of horns which are partly epidermal and partly bony. The paired horns of this animal have often been contrasted with those of the Deer, for example; but there is no fundamental difference between them. In the Giraffe a pair of bony outgrowths, originally separate from the skull which bears them, but ultimately ankylosed to it, are covered by a layer of entirely unmodified skin. A distinction of undoubtedly practical importance is usually drawn between the Hollow-horned Buminants, *i.e.* Oxen,

G-oats and Antelopes, and the Deer tribe. There is nevertheless no fundamental distinction. In the Antelopes there is a core of bone, the " os cornu" as it has been termed, which is covered by a horny layer, the horn proper, variously modified in shape and size according to the genus or species. In the Deer there is the